

ABSTRACT

A novel advanced set top terminal capable of digital decompression, displaying picture-on-picture, outputting multiple video channels, outputting multiple audio signals, outputting multiple audio channels corresponding to a single video channel, and other advanced functional capabilities for use in a television program delivery system is described. The invention relates to methods and apparatus for upgrading existing set top terminals to provide these advanced functional capabilities. The invention is particularly useful in television program delivery systems providing advanced functional capabilities using a set of hardware upgrades and/or an expansion card. Specifically, the invention is an ungradable system that supports displaying picture-on-picture, multiple video channels, multiple audio signals and multiple audio signals corresponding to a single video channel, among other features and capabilities through the use of internal software, hardware upgrades, an upgrade module and/or expansion cards. The upgraded hardware generally includes microprocessors, various output ports, tuners, demodulators, demultiplexors, decryptors and memory.